Amendments to the Claims

This listing of the claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (previously presented): A method of coherently combining multiple laser oscillators, comprising:

providing a plurality of lasers;

coupling the plurality of lasers;

configuring the coupling between the plurality of lasers so that each laser interacts with at least one other laser; and

pulling an intrinsic frequency distribution of the at least one other laser,

wherein the interactions between the lasers form a coherent optical output.

2. (original): The method of claim 1, wherein outputs of the plurality of lasers have relatively equal phases.

3. (original): The method of claim 2, wherein the plurality of lasers comprise a plurality of fiber lasers and fiber couplers are utilized to couple the optical outputs of the plurality of fiber lasers so that the plurality of fiber lasers form inphase states.

4. (original): The method of claim 1, wherein providing a plurality of lasers comprises:

providing a plurality of fibers having regions comprising a lasing medium;

disposing a first reflector at one end of each of the fibers of the plurality of fibers;

disposing a second reflector to receive the coherent optical output; and

pumping the lasing medium of each of the fibers with pump energy.

5. (original): The method of claim 1, wherein providing the plurality of lasers comprises:

providing a plurality of fibers coupled at a combiner on a second end, each fiber having a first reflector disposed at a first end and having a laser active region comprising

laser active material; and

pumping the laser active region of each fiber with pump energy.

6. (original): The method of claim 5, wherein the combiner is configured to provide spontaneous formation of inphase states among the light propagating in the plurality of fibers.

7. (original): The method of claim 5, wherein the combiner comprises:

a coupler coupling each fiber of the plurality of fibers; and

a second reflector receiving an optical output from said coupler.

8. (withdrawn): The method of claim 7, wherein the output of the coupler is radiated in freespace to said second reflector.

9. (previously presented): The method of claim 7, wherein the output of the coupler is directed to said second reflector by an optical element.

10. (original): The method of claim 5 further comprising coupling together the plurality of fibers at a position proximate to the first end.

11. (original): The method of claim 5 comprising coupling together pairs of fibers of the plurality of fibers at a position proximate to the first end.

12. (original): The method of claim 1 wherein the lasers comprise fiber lasers having lengths within 10% of each other.

13. (previously presented): An apparatus comprising:

a plurality of optical fibers, each optical fiber having a first reflector disposed at a first end and having a laser active region comprising laser active material;

one or more laser pump devices for applying pump energy to the laser active region of each optical fiber of the plurality of optical fibers; and

a combiner coupled to a second end of each of the optical fibers, the combiner combining light directed from the plurality of optical fibers and producing an optical output,

wherein said combiner comprises:

a first coupler coupling each of the plurality of optical fibers; and

a second reflector for receiving light from an output of the coupler and transmitting the optical output from the combiner, and

wherein said combiner is configured to couple the light directed from each fiber so that the light from one fiber interacts with at least one other fiber to pull an intrinsic frequency distribution of the light of the at least one other fiber.

14. (canceled)

15. (previously presented): The apparatus of claim 13, wherein pairs of the plurality of optical fibers are coupled at second couplers disposed between the reflector and the laser active region of each of the plurality of optical fibers.

16. (previously presented): The apparatus of claim 13, wherein the plurality of optical fibers are coupled at a second coupler disposed between the first reflector and the laser active region of each of the plurality of optical fibers.

17. (withdrawn): The apparatus of claim 13, wherein the output of the first coupler is radiated in freespace.

18. (previously presented): The apparatus of claim 13, wherein the output of the first coupler is directed to an optical element.

19. (previously presented): The apparatus of claim 13, wherein the second reflector partially reflects light back to the coupler and partially transmits the optical output.

20. (original): The apparatus of claim 13, wherein the optical fibers have lengths within

10% of each other.

21. (previously presented): The apparatus of claim 13, wherein said first coupler is formed by stretching and fusing the optical fibers and the degree of coupling between the fibers is controlled by the amount of stretching and the lengths of the fibers in the stretched and fused region.

22. (original): The apparatus of claim 16, wherein the optical fibers are coupled in a different patterns in the first coupler and the second coupler.

23. (previously presented): A laser apparatus comprising:

a plurality of laser devices; and

means for pulling an intrinsic frequency distribution of the laser devices to form a coherent optical output.

24. (previously presented): The laser apparatus of claim 23, wherein a laser light of each of the laser devices have relatively equal phases.

25. (original): The laser apparatus of claim 23, wherein the plurality of laser devices comprise a plurality of laser active optical fibers configured to operate as lasers and further comprising means for applying pump energy to said plurality of laser active optical fibers.

26. (previously presented): The laser apparatus of claim 25, wherein the means for pulling comprises fiber couplers that couple the laser light of the plurality of laser active optical fibers so that a laser light of the plurality of laser active optical fibers form inphase states.

27. (original): The laser apparatus of claim 25, further comprising:

a first reflective means at a first end of each of the laser active optical fibers; and

a second reflective means receiving the coherent optical output.

28. (previously presented): The laser apparatus of claim 25, wherein the means for pulling is configured to provide spontaneous formation of inphase states among the light propagating in the plurality of laser active optical fibers.

29. (withdrawn): The laser apparatus of claim 27, wherein the second reflective means receives the coherent optical output by free space radiation.

30. (original): The laser apparatus of claim 27, wherein the second reflective means receives the coherent optical output by an optical element.

31. (previously presented): The laser apparatus of claim 27 further comprising a second coupling means coupling together the plurality of laser active optical fibers at a position proximate to the first ends.

32. (previously presented): The laser apparatus of claim 27 further comprising a coupling means coupling together pairs of the plurality of laser active optical fibers at a position proximate to the first ends.

33. (original): The laser apparatus of claim 25 wherein the laser active optical fibers have lengths within 10% of each other.

34. (original): The laser apparatus of claim 25 wherein resonators formed by each of the laser active optical fibers have low Qs.

35-38. (canceled)

39. (previously presented): An apparatus comprising:

a plurality of optical fibers, each optical fiber having a first reflector disposed at a first end and having a laser active region comprising laser active material;

one or more laser pump devices for applying pump energy to the laser active

region of each optical fiber of the plurality of optical fibers; and

a combiner coupled to a second end of each of the optical fibers, the combiner combining light directed from the plurality of optical fibers and producing an optical output,

wherein said combiner is configured to couple the light directed from each fiber so that the light from one fiber interacts with at least one other fiber to pull an intrinsic frequency distribution of the light of the at least one other fiber,

wherein the optical fibers have lengths within 10% of each other.